## CLAIMS:

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- 1. Formulation for reducing dentine sensitivity in the oral cavity, which incorporates at least one physical desensitising agent in form of a light curable monomer that forms a resilient polymer gel upon curing.
- 5 2. Dentine sensitivity reducing formulation that includes a light-cured, formstable, resilient gel polymer.
  - 3. The formulation of claim 1 or 2, including a light sensitive polymerisation initiator and (1) at least one multifunctional polymer, or (2) at least one multifunctional polymer and at least one monomer, or (3) more than one monomer.
  - 4. The formulation of claim 3 in a suitable carrier liquid.
  - 5. The formulation of claim 4, wherein the carrier liquid includes water.
  - The formulation of claim 4 or 5 having a viscosity to allow fluid migration into exposed dentinal tubules by capillary action.
- 15 7. The formulation of any one of the preceding claims, including a gel polymer that swells in the presence of moisture.
  - 8. The formulation of any one of the preceding claims, wherein the gel polymer is permeable to oxygen and electrolytes.
- 9. The formulation of any one of claims 3 to 8, including a polycarboxylic acid 20 polymer.
  - 10. The formulation of any one of claims 3 to 9, including an acrylate or allyl derivative.

- 11. The formulation of claim 10, wherein the monomer is selected from the group consisting of 2-hydroxy ethylmethacrylate, glycol dimethacrylate, diallyloxyacetic acid, poly(ethylene glycol) dimethacrylate, 2-acrylamidoglycolic acid, acrylic acid, methacrylic acid, and itaconic acid.
- 5 12. The formulation of any one of claims 3 to 11, wherein the light sensitive polymerisation initiator is a quinone derivative in combination with a quaternary amine derivative.
- 13. The formulation of claim 12, incorporating camphorquinone and a quaternary amine derivative selected from the group consisting of N,N,3,5 10 tetramethyl aniline, poly(ethyleneimine), N,N,N,N-tetraethyldiethylenetriamine, and N,N-diethylenediamine.
  - 14. The formulation of any one of claims 3 to 13, further including a preservative such as butylated hydroxy toluene or hydroquinone, in particular methyl hydroquinone.
- 15. The formulation of any one of claims 3 to 14, having the following constituents in % values by weight: Polycarboxylic acid polymer about 1 to about 50, 2-hydroxy ethylmethacrylate about 10 to about 80, Glycol dimethacrylate about 1 to about 50, Water about 1 to about 70, Camphorquinone about 0.01 to about 5, Tetramethyl aniline about 0.01 to about 5, and Butylated hydroxy toluene 20 about 0.01 to about 5.
  - 16. The formulation of claim 15, wherein the constituents are present in the following amount in % by weight: Polycarboxylic acid polymer about 5 to about 15, 2-hydroxy ethylmethacrylate about 50 to about 80, Glycol dimethacrylate about 3 to about 9, Water about 5 to about 25, Camphorquinone about 0.1 to about 1, Tetramethyl aniline about 0.1 to about 1 and Butylated hydroxy toluene about 0.01 to about 0.1.

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17. The formulation of claim 16, wherein the constituents are present in the following amounts:

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	Polycarboxylic acid polymer	about 7.5% by weight
	2-Hydroxy ethylmethacrylate	about 74.5% by weight
	Diallyloxyacetic acid, sodium salt	about 6% by weight
	Water	about 12% by weight
	Camphorquinone	about 0.2% by weight
•	Tetramethyl aniline	about 0.22% by weight
	Butylated hydroxy toluene	about 0.05% by weight

18. A method of preventing or reducing sensitivity or pain in teeth, which method includes applying a formulation in accordance with any one of claims 1 to 17 to exposed dentinal tubules of teeth, allowing said formulation to migrate into the tubules, and curing the formulation by application of light with a wave length in the range of 300 to 650nm, whereby soft resilient gel plugs are formed within the tubules.

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